SPECIFICATION

TITLE OF THE INVENTION

OPTICAL INFORMATION RECORDING APPARATUS FOR STABLE RECORDING

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an apparatus and a method for recording information on a recording medium such as an optical disk by applying a laser beam to an optical recording medium.

2. Description of Prior Art

An optical information recording medium such as an optical disk has been recently developed and marketed as an external memory of a computer and a medium for recording images and sounds. Optical disks that are already being practically used and on which data can be recorded include organic-dye-based, phase-change-type, and magneto-optic disks in which data is recorded by applying a laser beam to a recording film.

Pulse width modulation (hereinafter referred to as PWM) is known for recording data on an optical disk at a high density. The PWM technology performs modulation so that edges at the leading and trailing ends of record marks correspond to one of a digital signal. Such a technique is favorable in order to record data at a high density because more bits can be assigned in a record mark of the same length than the pulse position modulation technology for performing modulation so that the position of a record mark corresponds to one of a digital signal.